

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB03/02523

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H04Q 7/20

US CL : 455/450, 452.1, 452.2, 457, 515

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/450, 452.1, 452.2, 457, 515

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,453,151 B1 (KIANG et al) 17 September 2002 (17.09.2002), column 4, lines 34-49, column 5, lines 10-27, column 6, lines 60-67, column 8, lines 25-54.	1-6, 9-16, 19, 20-21, 23
Y	US 6,272,124 B1 (AHN et al) 07 August 2001 (07.08.2001), column 6, lines 63-67, column 12.	1-2, 3, 10, 13, 20, 23
A	US 5,873,047 A (NAKANO et al.) 16 February 1999 (16.02.1999), column 12, lines 30-50).	1-30

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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document member of the same patent family

Date of the actual completion of the international search

13 November 2003 (13.11.2003)

Date of mailing of the international search report

08 DEC 2003

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